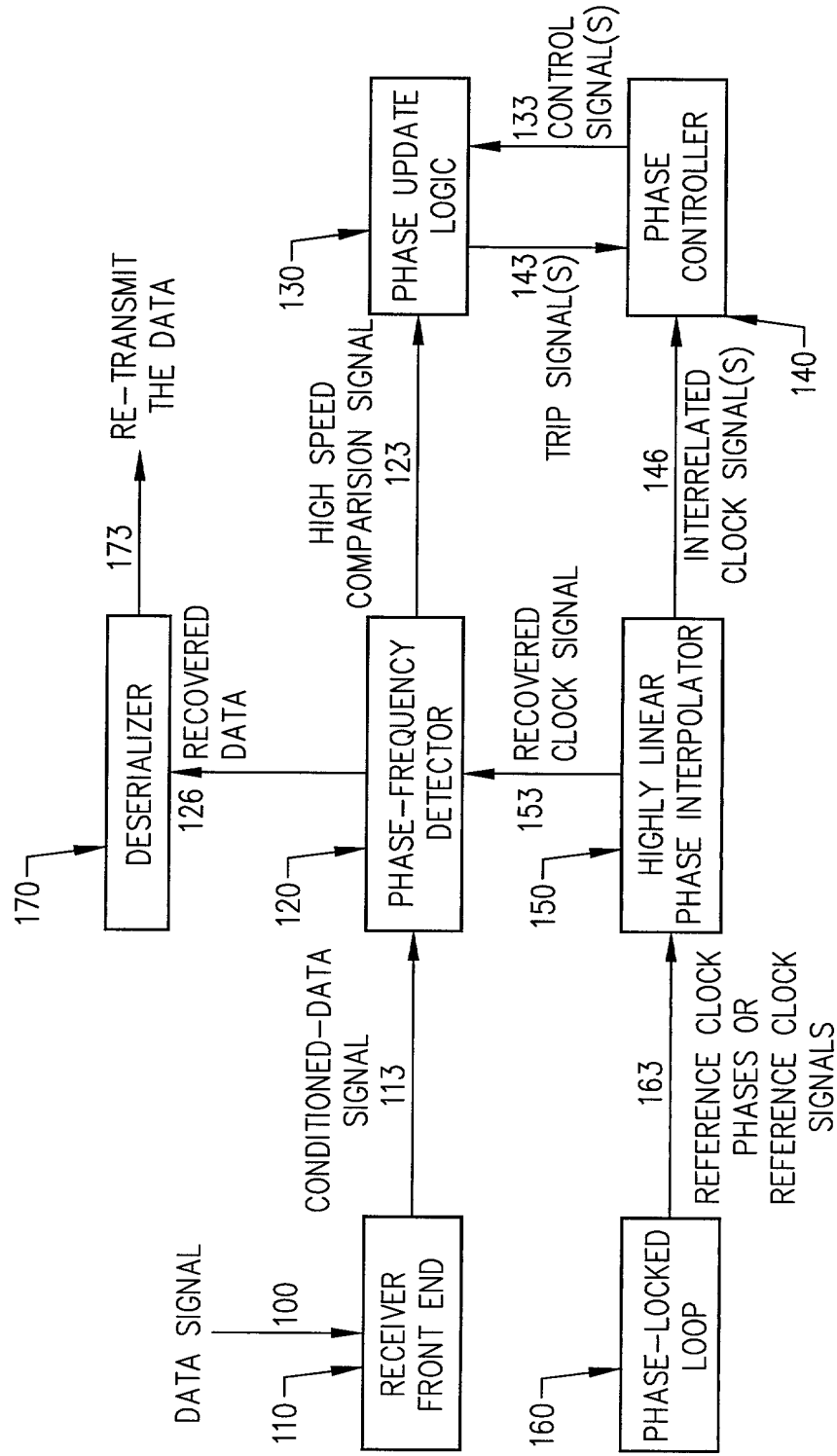


FIGURE 1



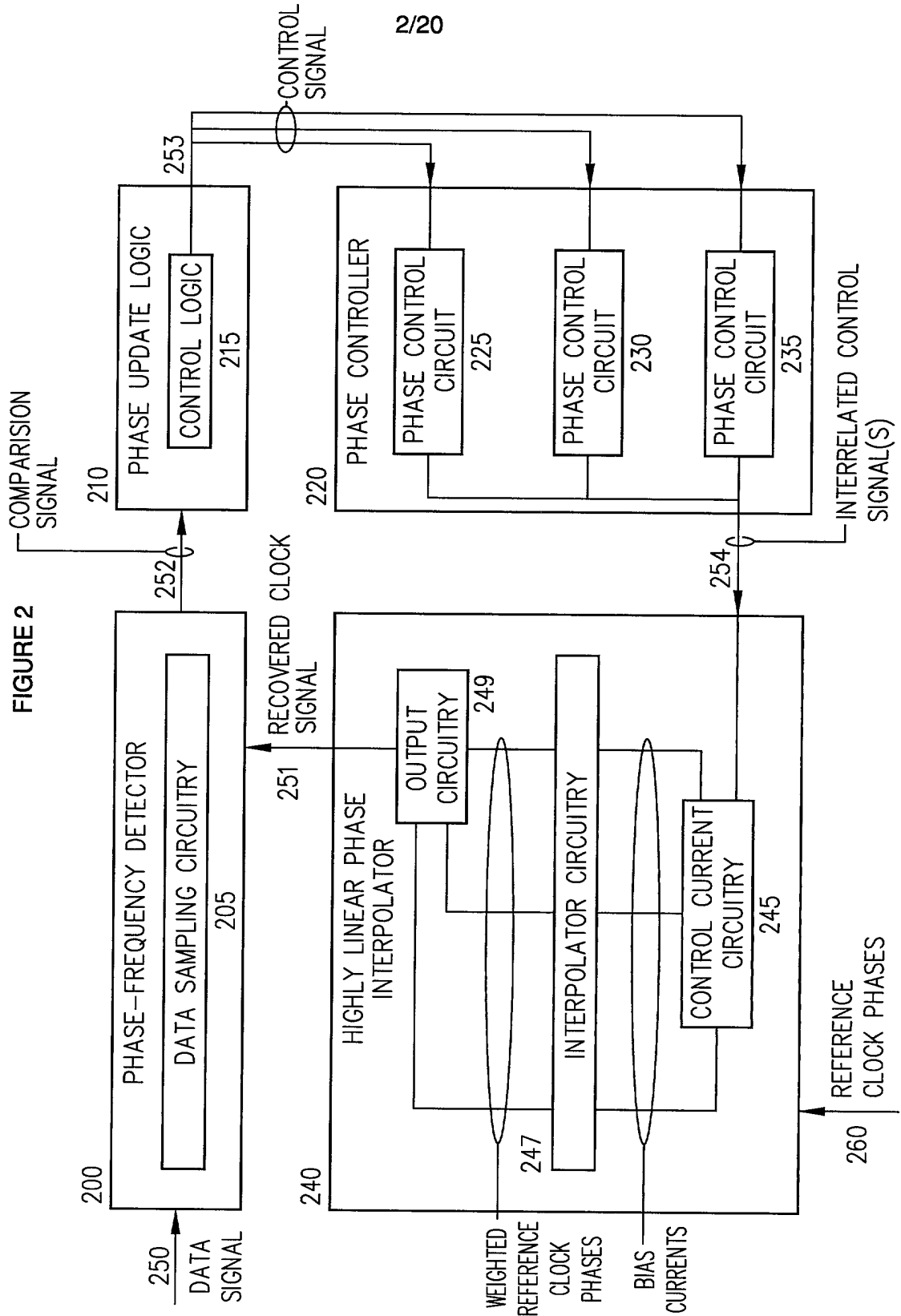


FIGURE 3A

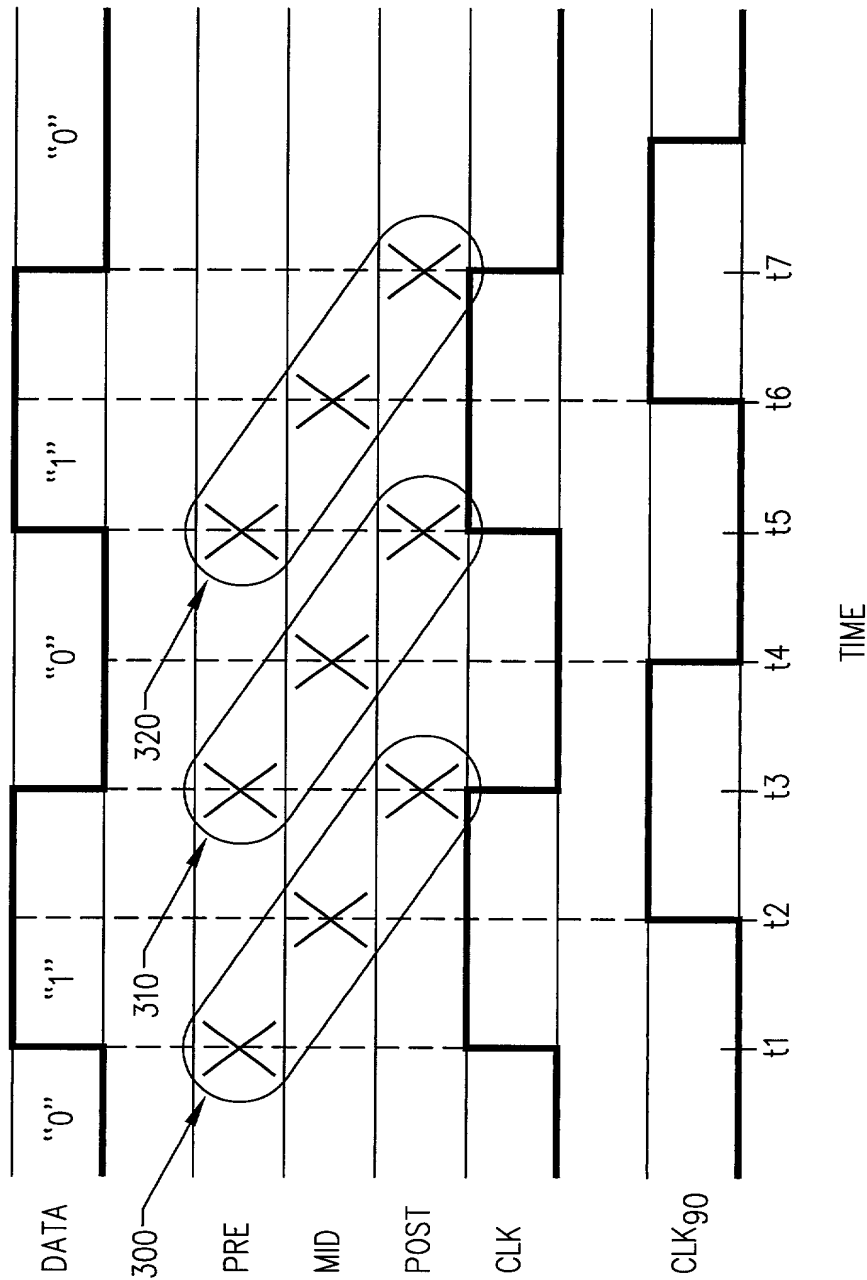


FIGURE 3B

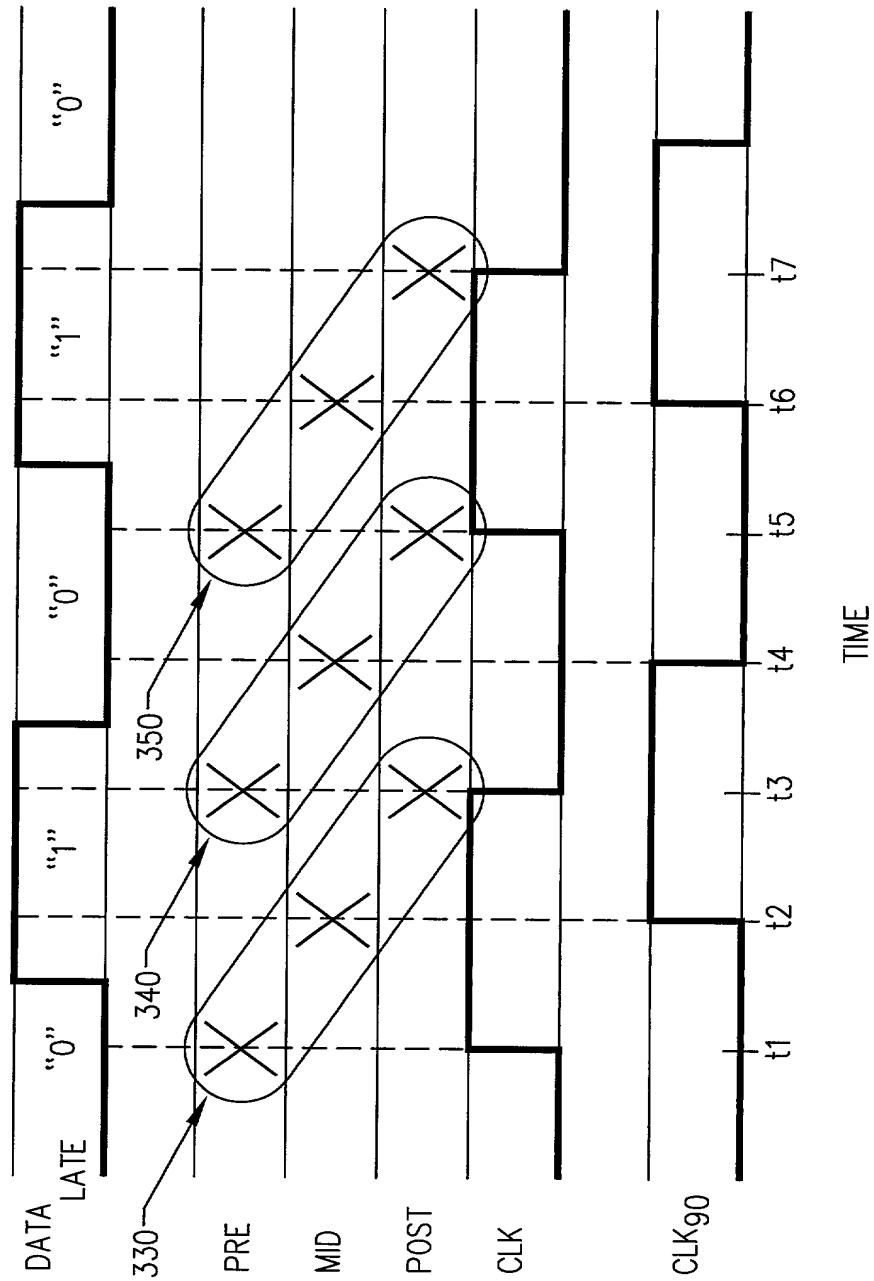
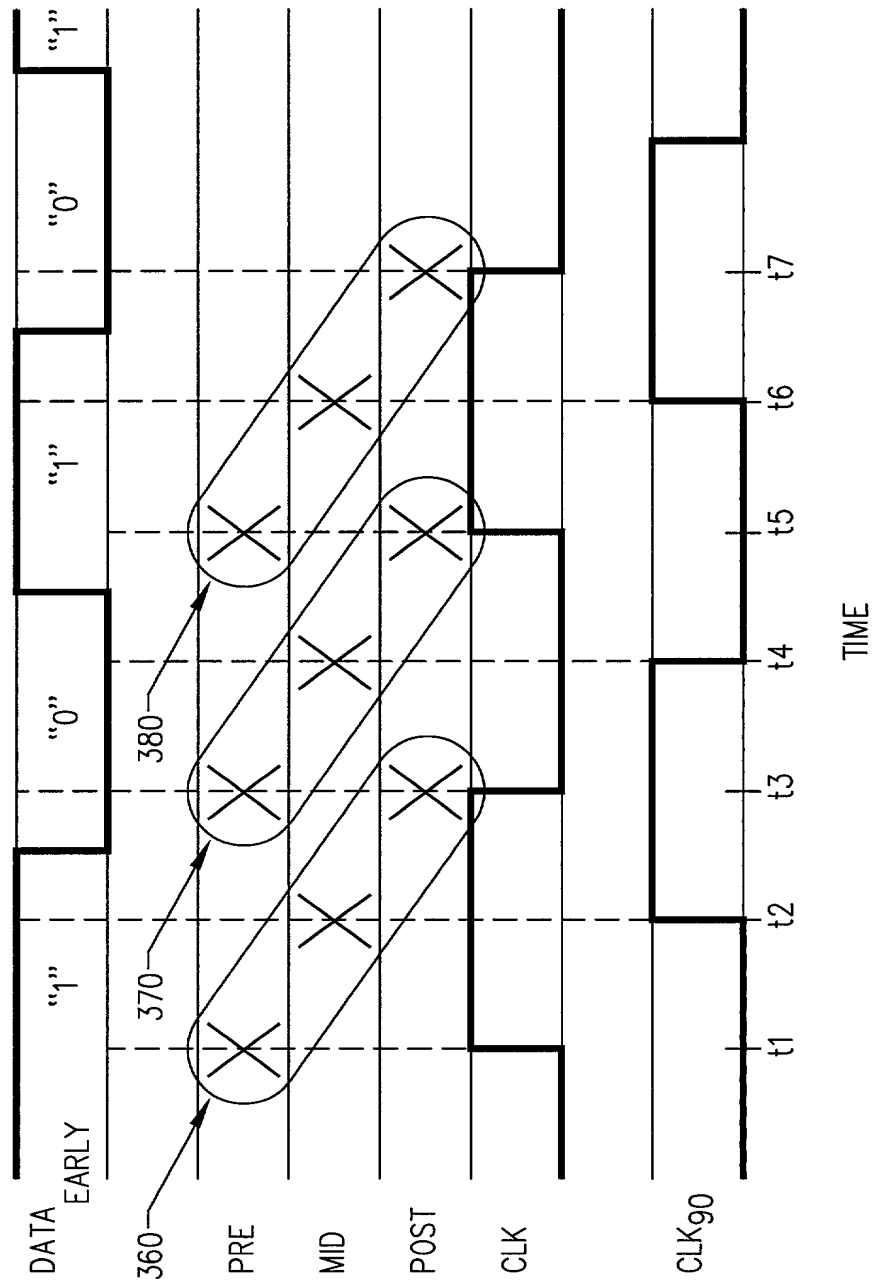


FIGURE 3C



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FIGURE 4

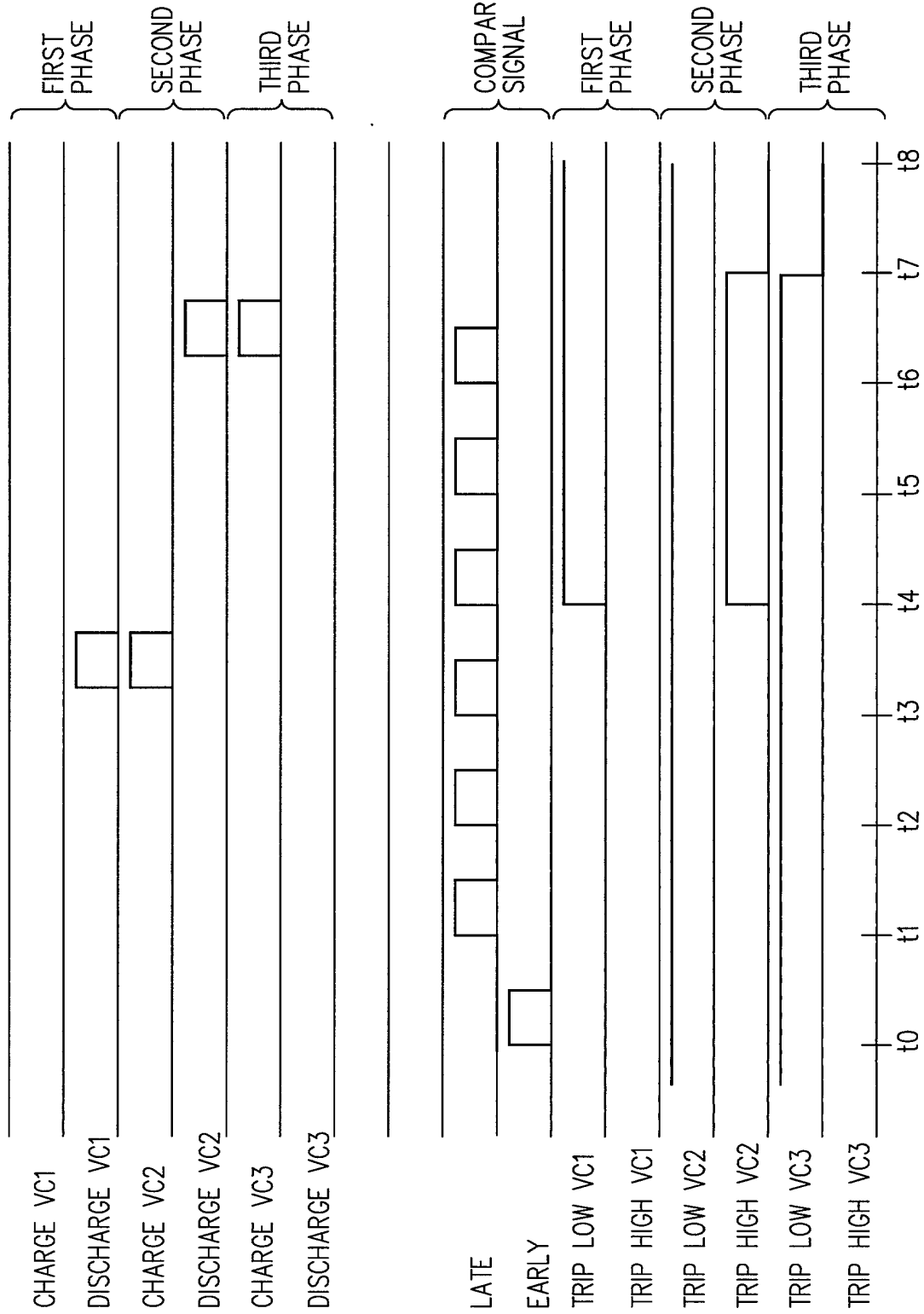
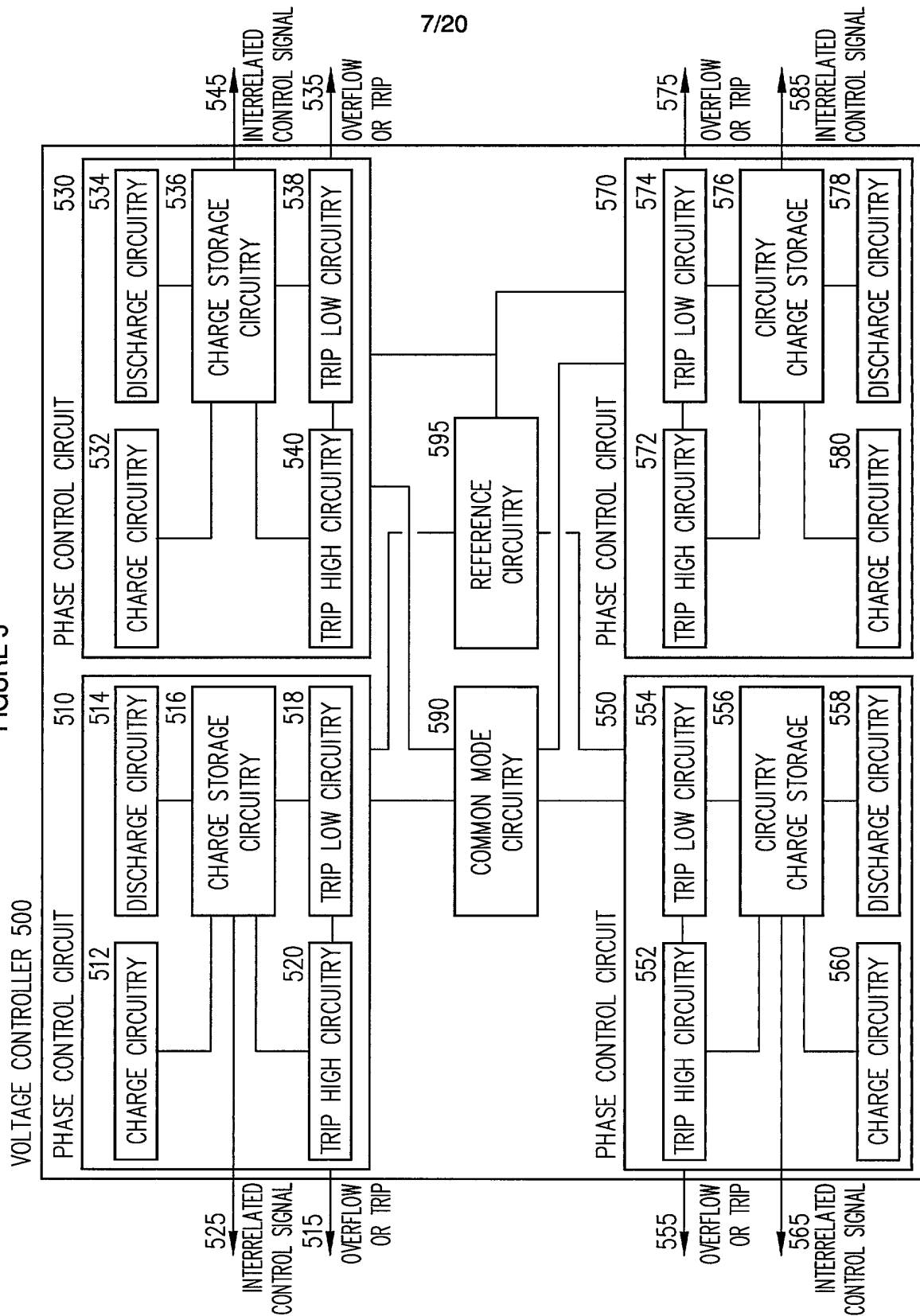
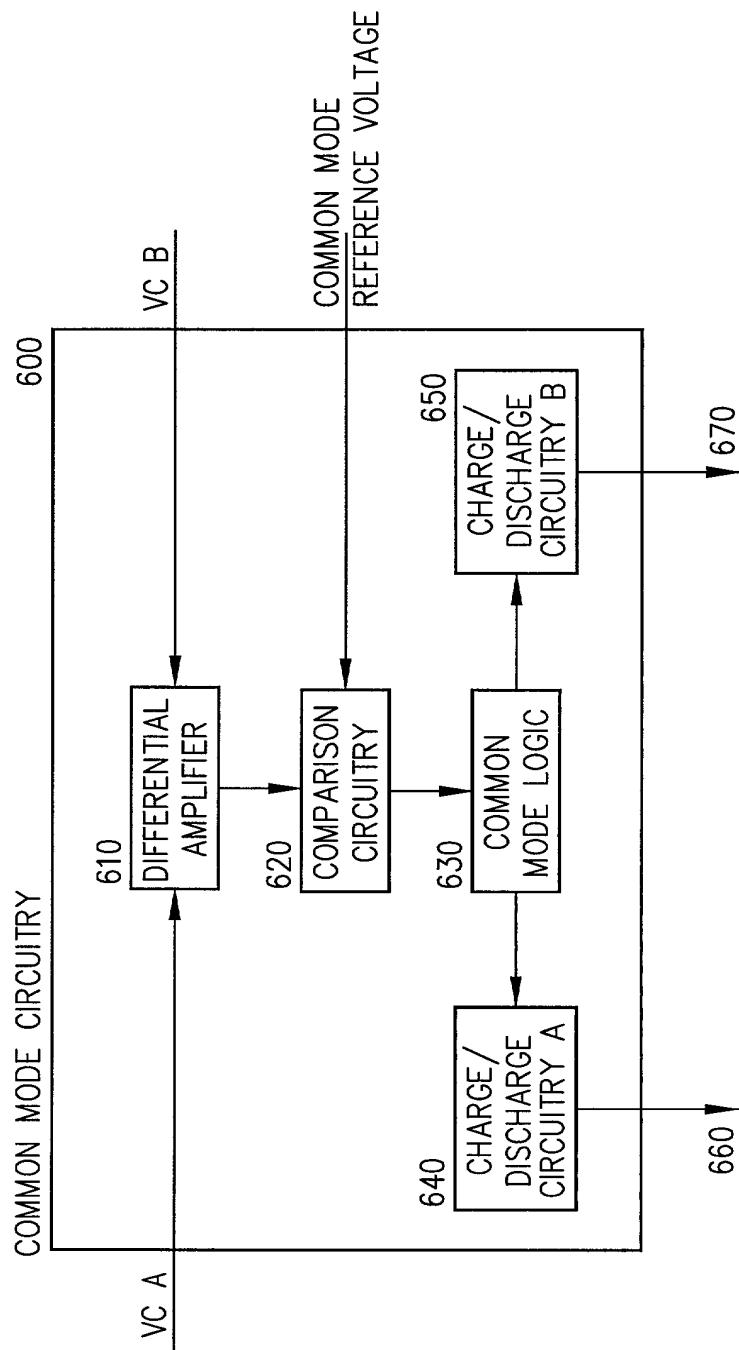


FIGURE 5

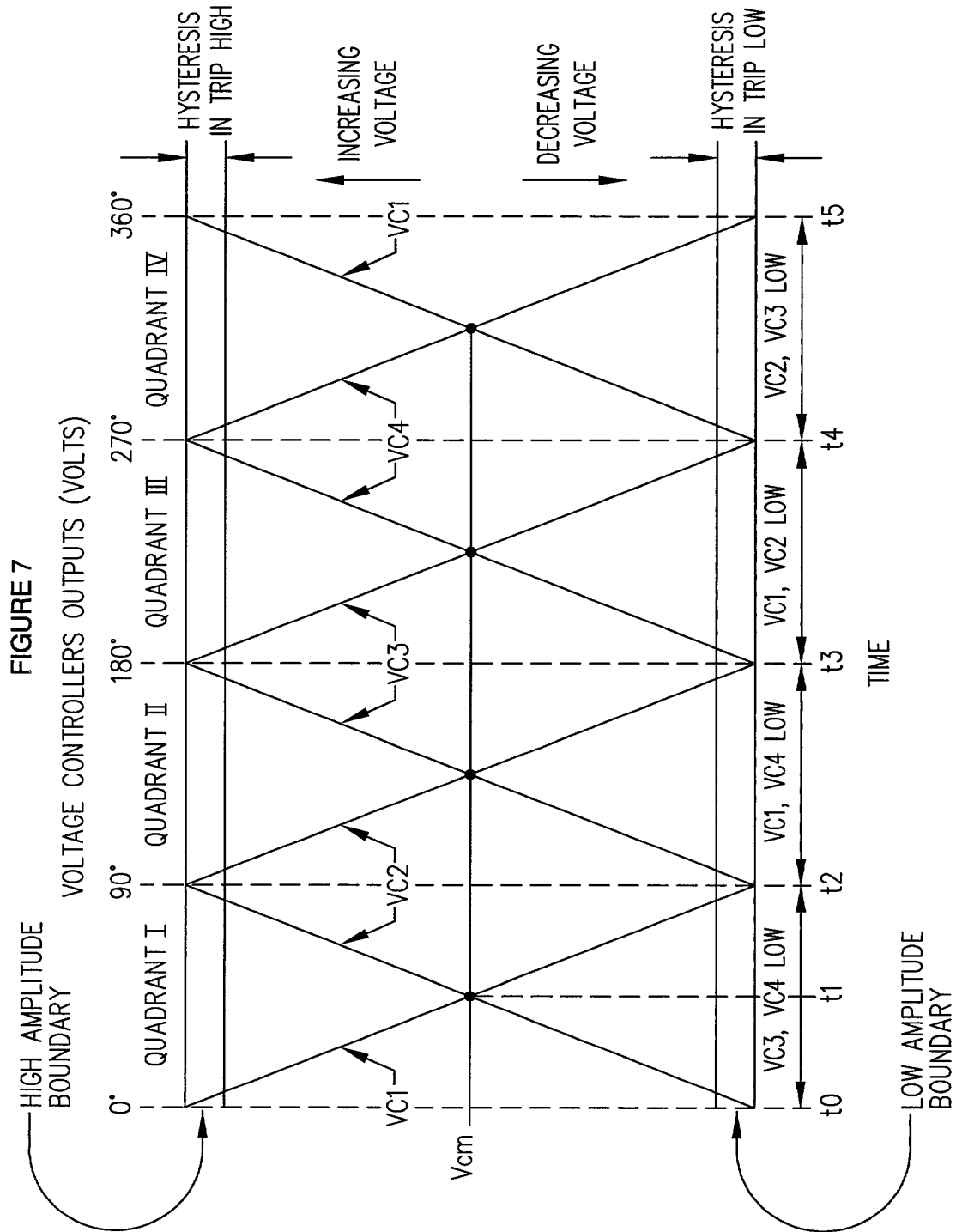


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FIGURE 6

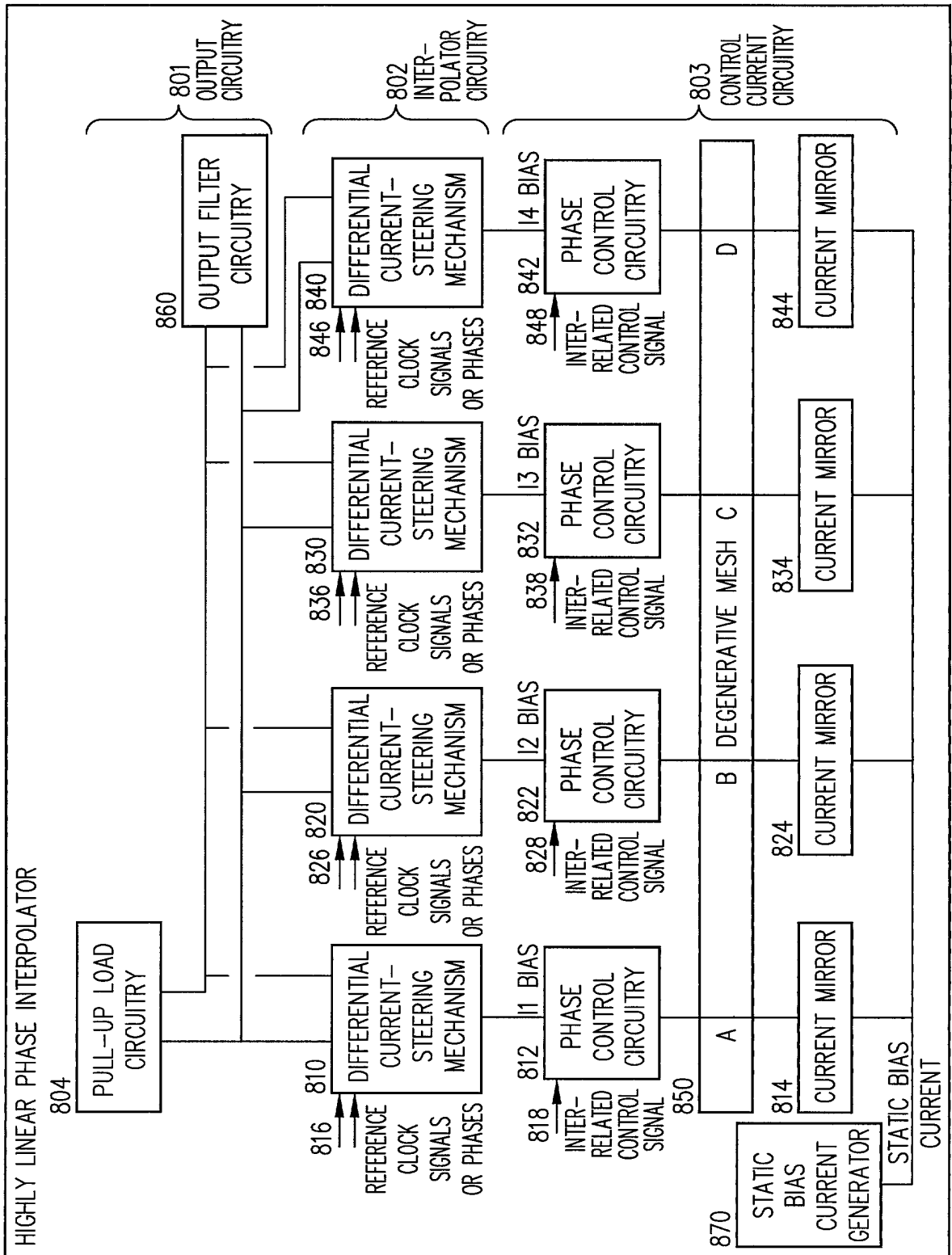


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FIGURE 8



The diagram illustrates a four-phase current source circuit, labeled 903, which is part of a larger system for a mesh-based circuit. The circuit is organized into four main sections, each corresponding to a phase: PHASE A, PHASE B, PHASE C, and PHASE D.

PHASE A: This section includes a **PHASE CONTROL CIRCUITRY 912** and a **CURRENT MIRROR 914**. The phase control circuitry 912 is driven by a control current I_A (indicated by arrow 918) and produces a current I_A (indicated by arrow 928). This current I_A is fed into the current mirror 914, which is also connected to a node labeled **A**.

PHASE B: This section includes a **PHASE CONTROL CIRCUITRY 922** and a **CURRENT MIRROR 924**. The phase control circuitry 922 is driven by a control current I_B (indicated by arrow 928) and produces a current I_B (indicated by arrow 938). This current I_B is fed into the current mirror 924, which is also connected to a node labeled **B**.

PHASE C: This section includes a **PHASE CONTROL CIRCUITRY 932** and a **CURRENT MIRROR 934**. The phase control circuitry 932 is driven by a control current I_C (indicated by arrow 938) and produces a current I_C (indicated by arrow 948). This current I_C is fed into the current mirror 934, which is also connected to a node labeled **C**.

PHASE D: This section includes a **PHASE CONTROL CIRCUITRY 942** and a **CURRENT MIRROR 944**. The phase control circuitry 942 is driven by a control current I_D (indicated by arrow 948) and produces a current I_D (indicated by arrow 958). This current I_D is fed into the current mirror 944, which is also connected to a node labeled **D**.

DEGENERATIVE MESH 950: The nodes **A**, **B**, **C**, and **D** are interconnected by a network of resistors, forming a **DEGENERATIVE MESH 950**. The resistors are labeled as follows: R_{A-B} (between A and B), R_{B-C} (between B and C), R_{C-D} (between C and D), R_{A-C} (between A and C), R_{B-D} (between B and D), and R_{A-D} (between A and D). The mesh is connected to a common ground line at the bottom.

CONTROL CURRENT CIRCUITRY 903: The entire circuit is controlled by a **CONTROL CURRENT CIRCUITRY 903**, which provides the control currents I_A , I_B , I_C , and I_D to the phase control circuitries 912, 922, 932, and 942, respectively.

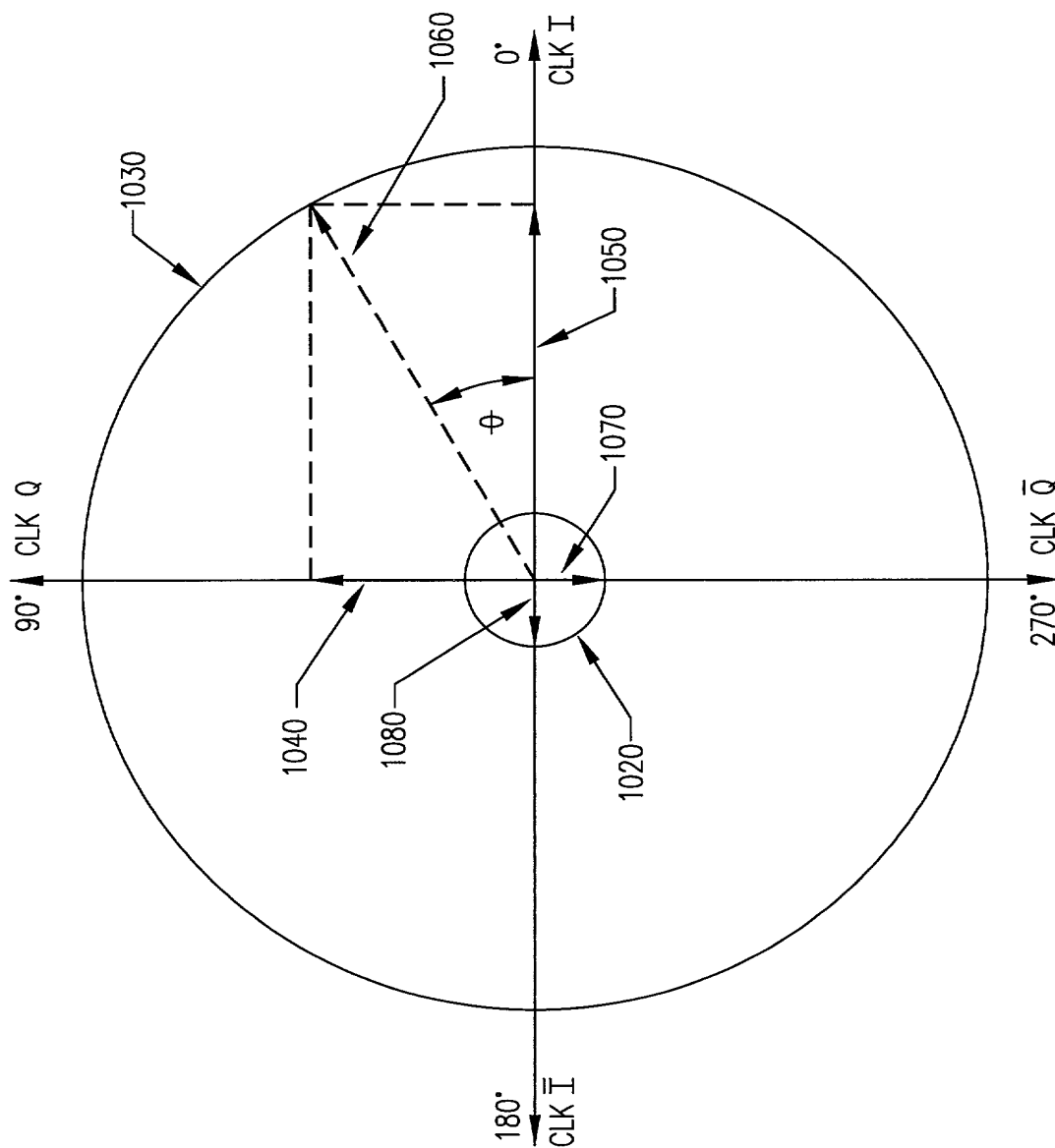
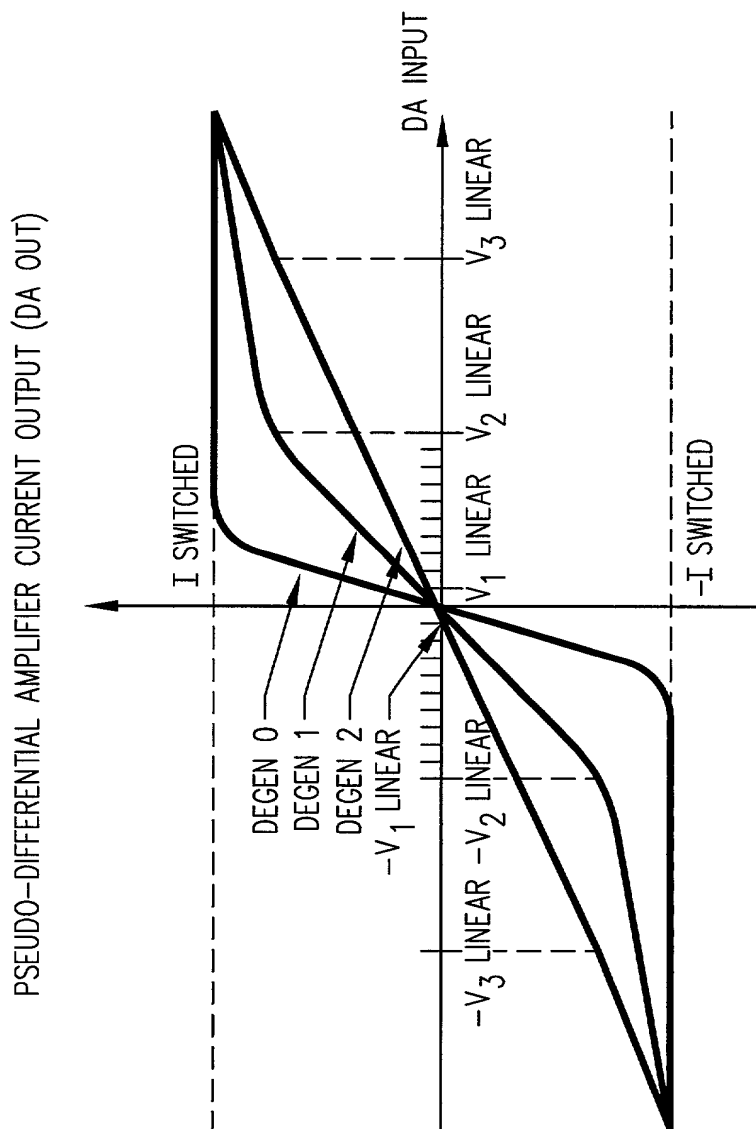
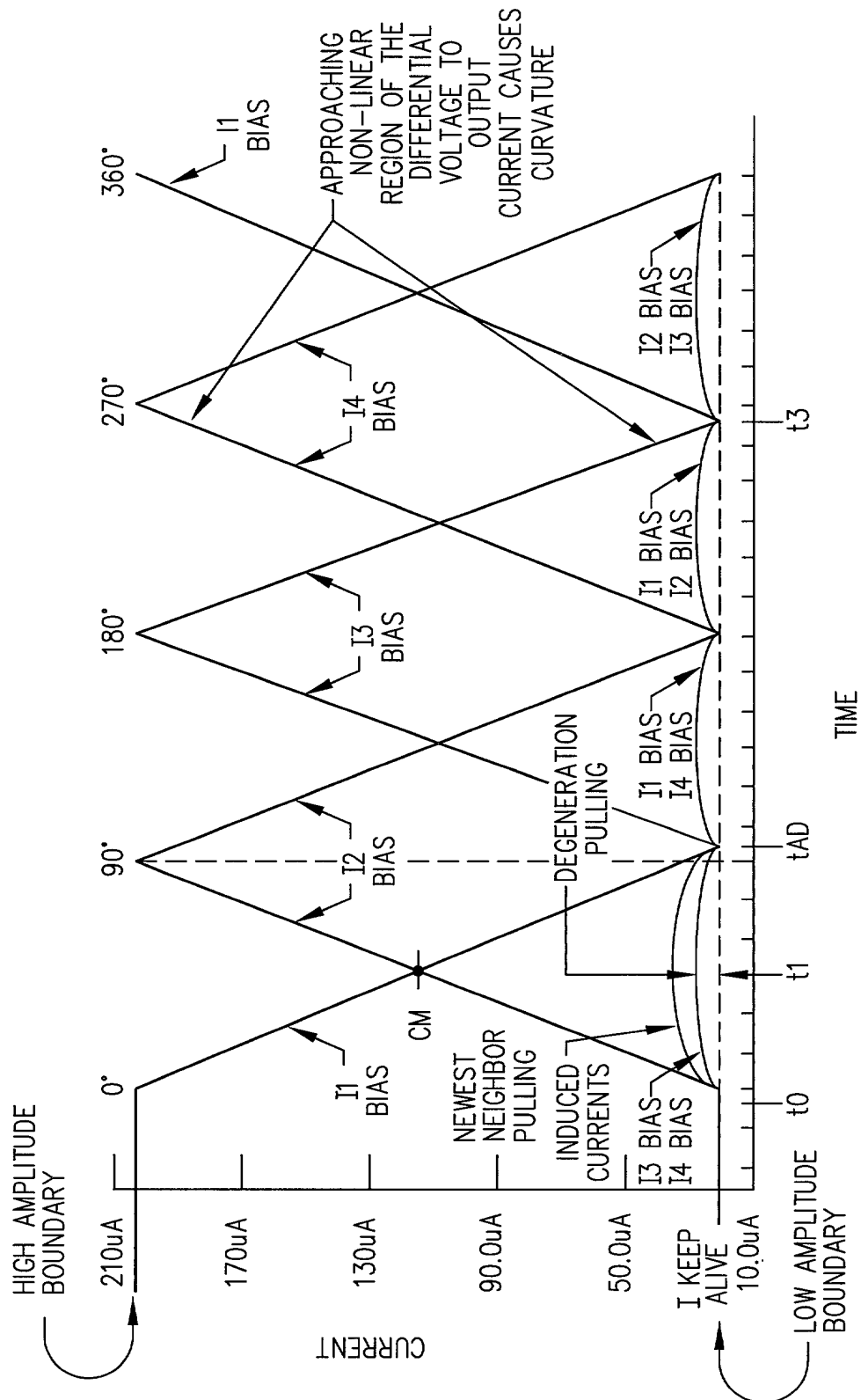


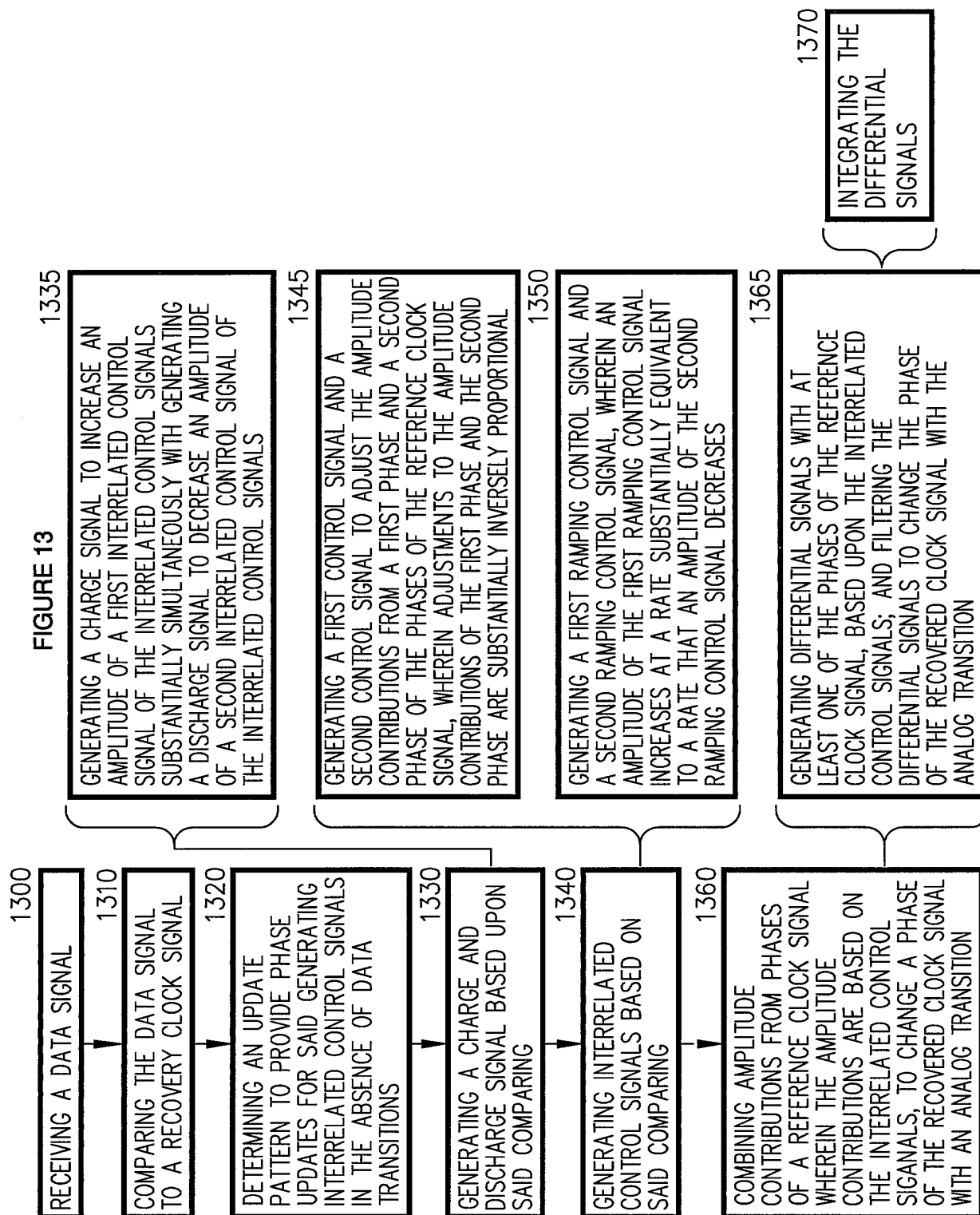
FIGURE 11



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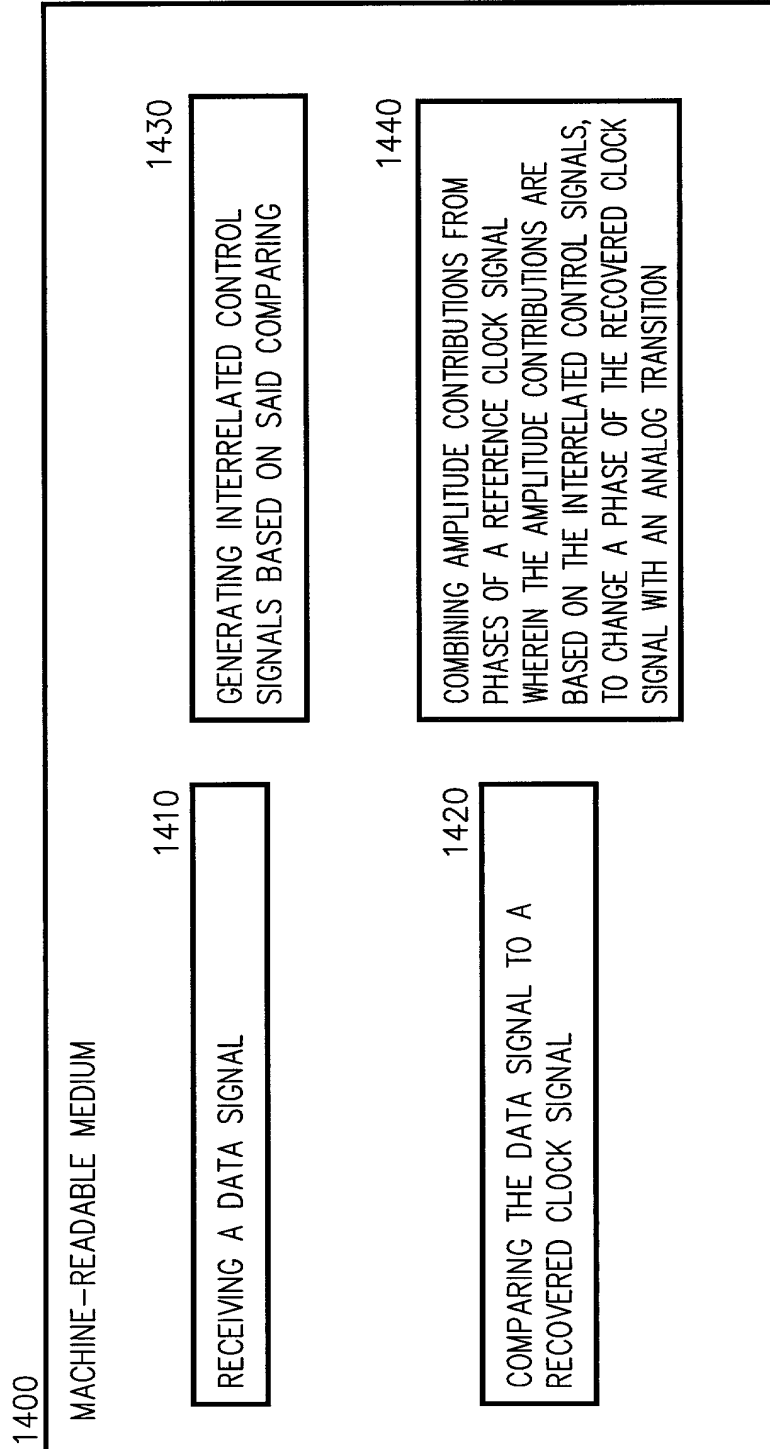
FIGURE 12





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FIGURE 14



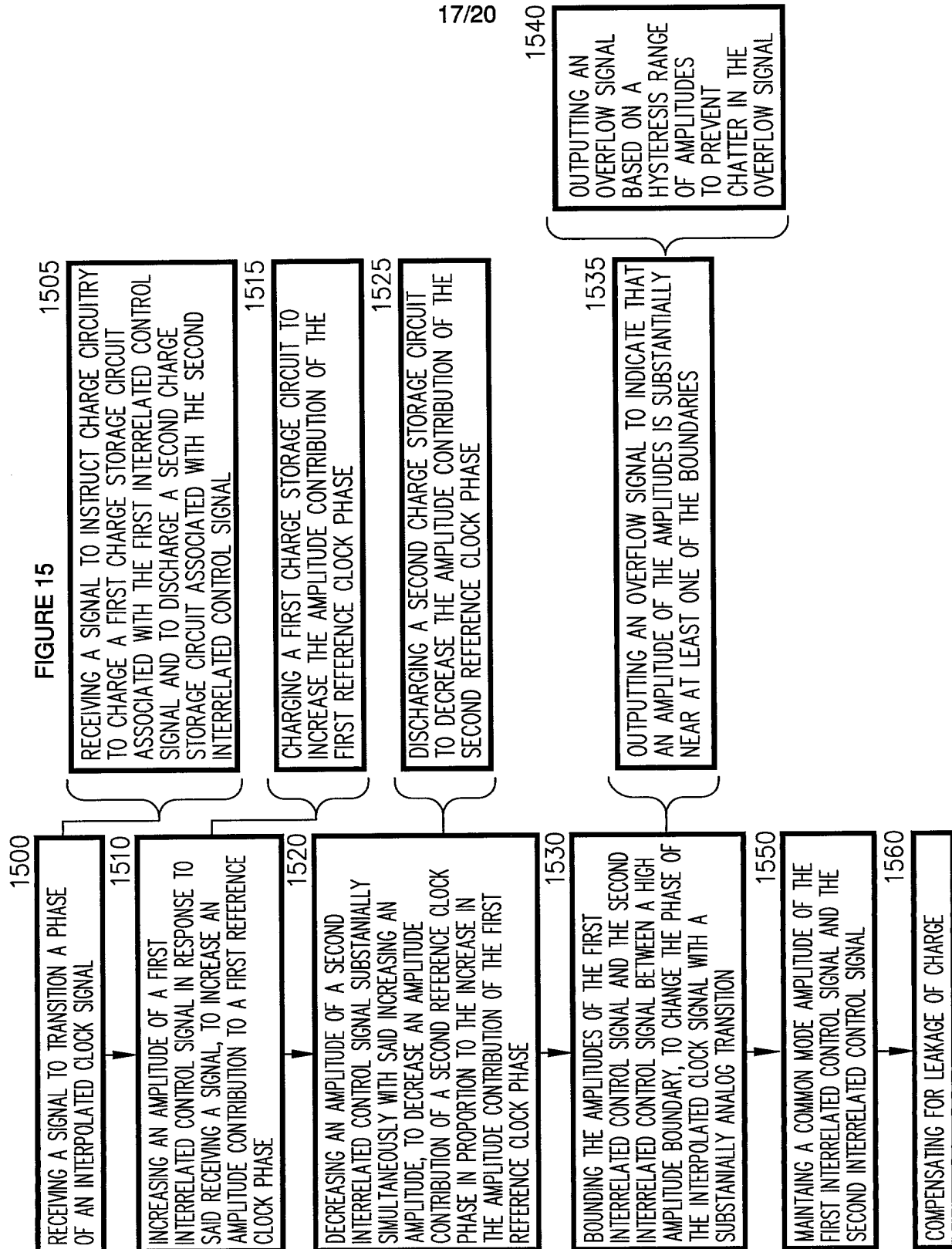
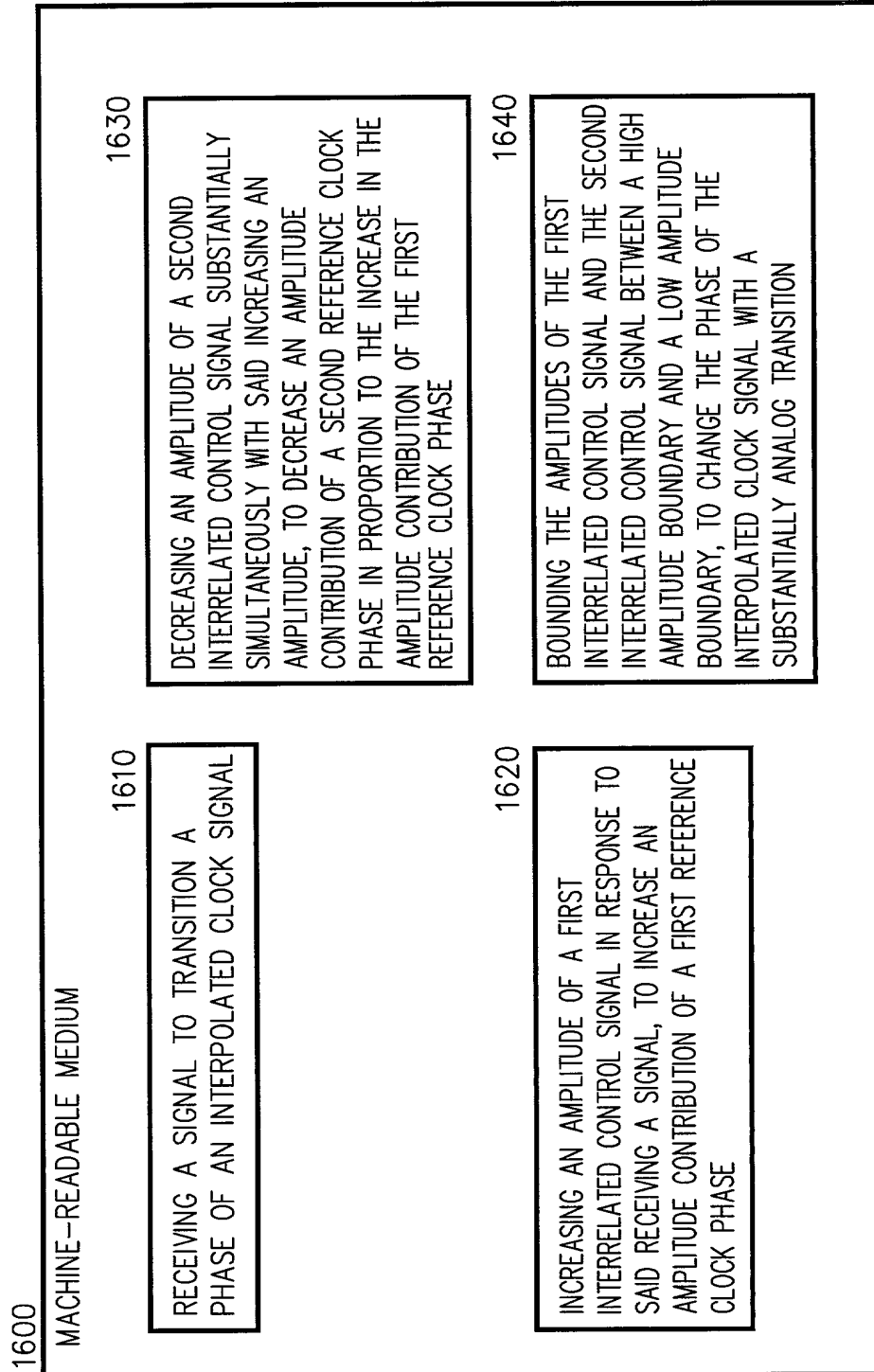


FIGURE 16



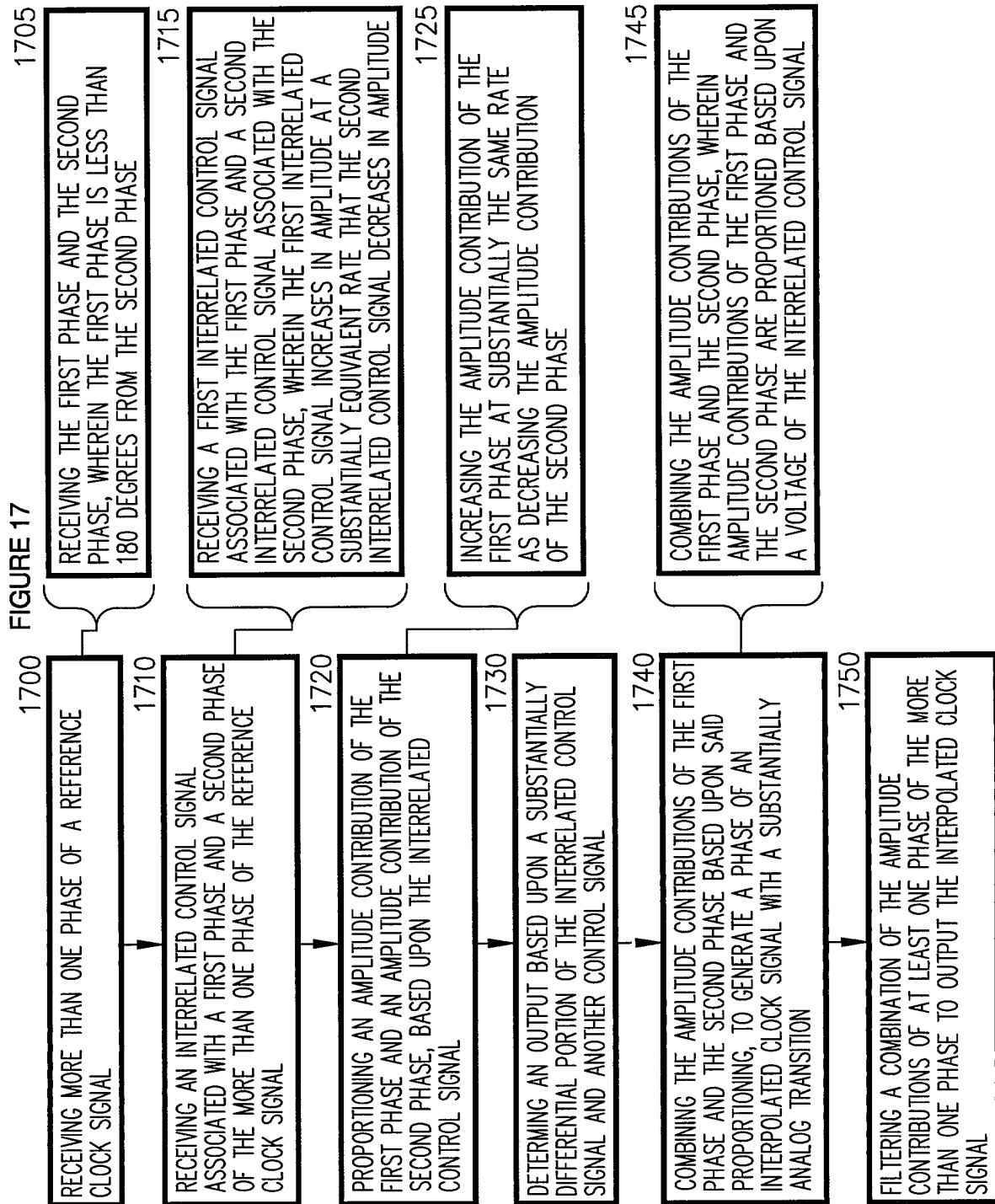


FIGURE 18

